

Maritime Rescue Co-ordination Centre (MRCC) & Coast Station Emergency Telecommunications Survey

Spectrum Management Task Force Meeting | 6-8 February 2023 | Jamaica

Kim Mallalieu,
Deputy Chair, TATT
& Pro bono Technical Advisor, Smart Seas Project
on behalf of the Smart Seas Team



SMART SEAS PROJECT: TT MRCC Countries

- Joint initiative of the ITU, CTU & TATT, supported by the Government of the Republic of Trinidad and Tobago (GoRTT)
- To increase the resilience of small-scale fishers through ICTs with emphasis on the enabling environment



**Policy &
Regulation**



Operations



Capacity



Technology

Transferable: other sectors & marginalized communities | Extensible: Caribbean & world-wide

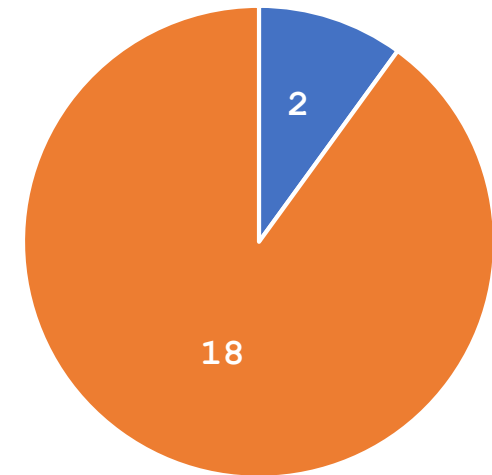
Gaps in ITU Notification Compliance

No. **20.16** of the ITU's Radio Regulations (RRs):

*"Administrations **shall** take all appropriate measures to **notify** the Radiocommunication Bureau immediately of any changes in the operational information contained in **Lists IV and V**, in view of the importance of this information, particularly with regard to safety."*

Country	Status	Country	Status
Anguilla	×	Jamaica	✓
Antigua and Barbuda	×	Montserrat	×
Barbados	×	St. Kitts and Nevis	×
Belize	×	Saint Lucia	×
British Virgin Islands	×	St. Maarten	×
Cayman Islands	×	St. Vincent and the Grenadines	×
Cuba	×	Suriname	✓
Dominica	×	The Bahamas	×
Grenada	×	Trinidad and Tobago	×
Guyana	×	Turks and Caicos	×

MARS Notification Status (List IV)

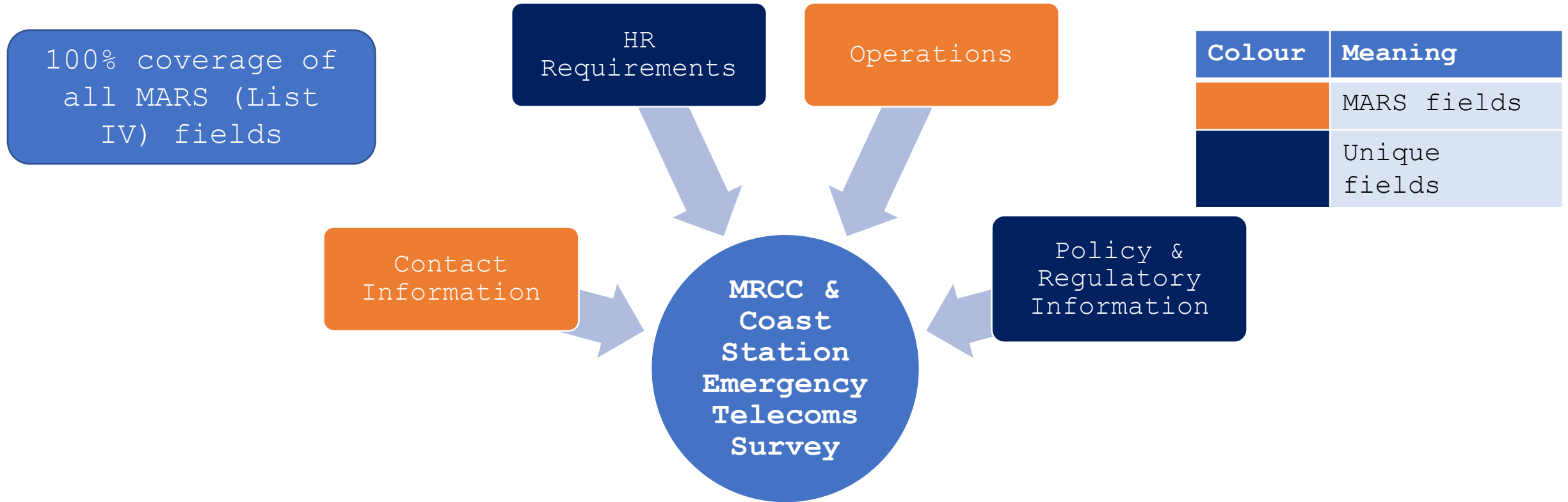


■ Have Notified ■ Have Never Notified

List IV: Coast Stations and Special Service Stations

List V: Ship Stations and Maritime Mobile Service Identity Assignments

Smart Seas: MRCC & CS Survey



MRCC & CS Survey Outputs

1. A registry and map of coast stations and MRCCs in the Caribbean
2. Simulations of coast station and MRCC radio coverage
3. Checklists of resources in place, vis-à-vis those essential, for the effective operation and maintenance of these stations

Survey Artefacts

1



© Kim Malalieu

METHODOLOGICAL GUIDEBOOK FOR MRCC & COAST STATION EMERGENCY TELECOMMUNICATIONS SURVEY

UNDER THE SMART SEAS TOOLKIT FOR DISASTER RESILIENCE PROJECT

23 FEBRUARY 2022

2

MARITIME RESCUE COORDINATION CENTRE (MRCC) & COAST STATION SURVEY

PRE-SURVEY INFORMATION & CONSENT FORM

OVERVIEW

The Spectrum Management Task Force ("SMTF") provides key input into the development of regionally harmonized policies for the planning and management of the radio-communication spectrum. As a technical group convened by the Caribbean Telecommunications Union, SMTF's work contributes to ICT-enabled cooperation and development in the Caribbean. This survey on national coast stations and maritime rescue coordination centres (MRCCs) sets out to gather key data to ultimately strengthen communications resilience in the marine environment for improved safety at sea.

The survey findings will be used to:

- Identify gaps within existing policy, regulatory and capacity provisions and to formulate gap-filling measures.
- Gather the data required to populate a registry of, and map, the coast stations and MRCCs, as emergency contacts for Caribbean seafarers
- Gather the data required to simulate and estimate radio coverage by the coast stations and MRCCs within the region
- Identify the resources (human, infrastructure, policy and regulatory) used to operate and maintain coast stations and MRCCs within the region
- Identify, after analysis of the survey's results, the baseline resources required to operate and maintain Caribbean coast stations and MRCCs
- Identifying key areas for research, and inform future decisions and spectral planning by regulators and policy makers

SCOPE

This survey therefore sets out to gather the following data from national coast stations and MRCCs within CTU member states:

1. General coast station/MRCC information
2. Station personnel
3. RF equipment
4. Operations
5. National maritime communications policy and regulatory provisions

PARTICIPANTS

National coast stations and MRCCs within the Caribbean. Station managers may be able to complete the form, but may require support from technical staff to complete Sections 3 - 5.

COUNTRIES SURVEYED

CTU member states

INSTRUCTIONS

Please:

1. enter all responses in English (in **BLOCK LETTERS** if handwritten)
2. provide all positions in degrees, minutes, decimal-minutes notation
3. email Nigel.Cassimire@ctu.int for additional questions and concerns

CONSENT FORM

Participation:

Participation in this study is voluntary, and may be refused or terminated at any point, by the respondents. Any further questions, concerns and recommendations can be posed to Mr. Nigel Cassimire of the CTU, at: nigel.cassimire@ctu.int.

Benefits:

This survey will benefit all respondents, seafarers, regulators and policy makers, by producing a resource pack, which include but are not limited to:

- A registry of coast stations and MRCCs within the Caribbean
- A simulated coverage map of coast stations and MRCCs within the Caribbean
- A **registry of channel usage within the marine band**, including primary working channels for all coast stations (other than VHF channel 16)
- An inspection checklist, for coast station and MRCC equipment
- A policy brief, with recommendations to improve the state of emergency communications provisions offered by existing coast stations and MRCCs within the Caribbean
- Print-ready, wallet-sized call card design with MRCC and coast station contact details by country, for printing and distribution by fisherfolk organizations, ports, etc.
- An output report, which includes the above artefacts, along with a coverage analysis and recommendations to fill any uncovered gaps based on the responses

Risks:

This survey poses minimal risks to the parties involved, as the data collected should not pose any threats to the participants' operations.

3



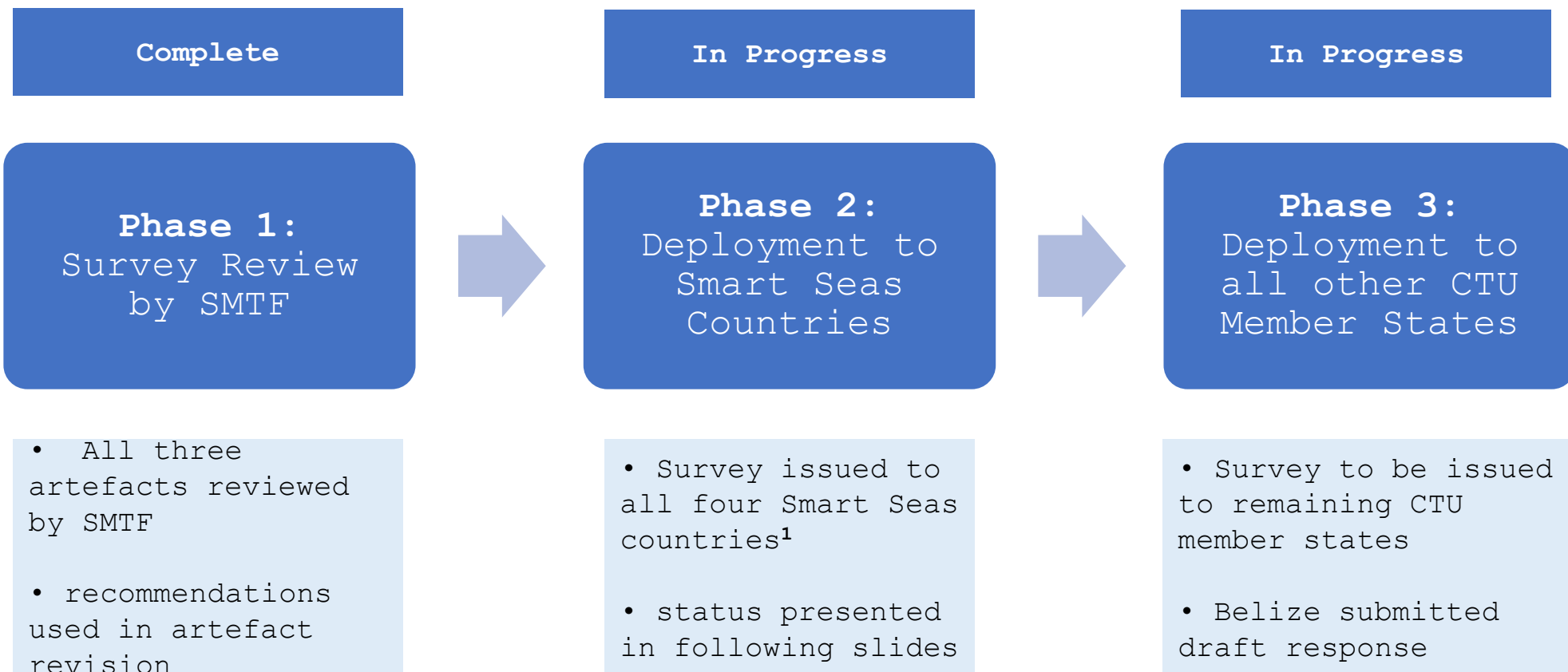
© Kim Malalieu

USER GUIDEBOOK FOR MRCC & COAST STATION EMERGENCY TELECOMMUNICATIONS SURVEY

UNDER THE SMART SEAS TOOLKIT FOR DISASTER RESILIENCE PROJECT

23 FEBRUARY 2022

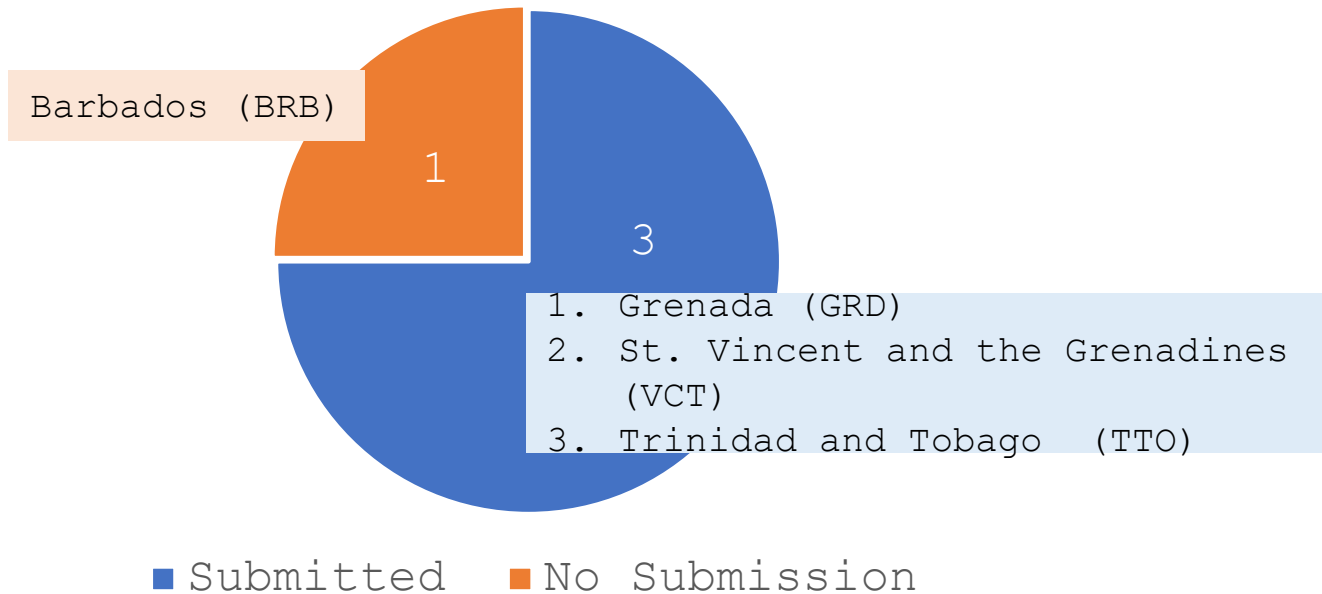
Rollout Status



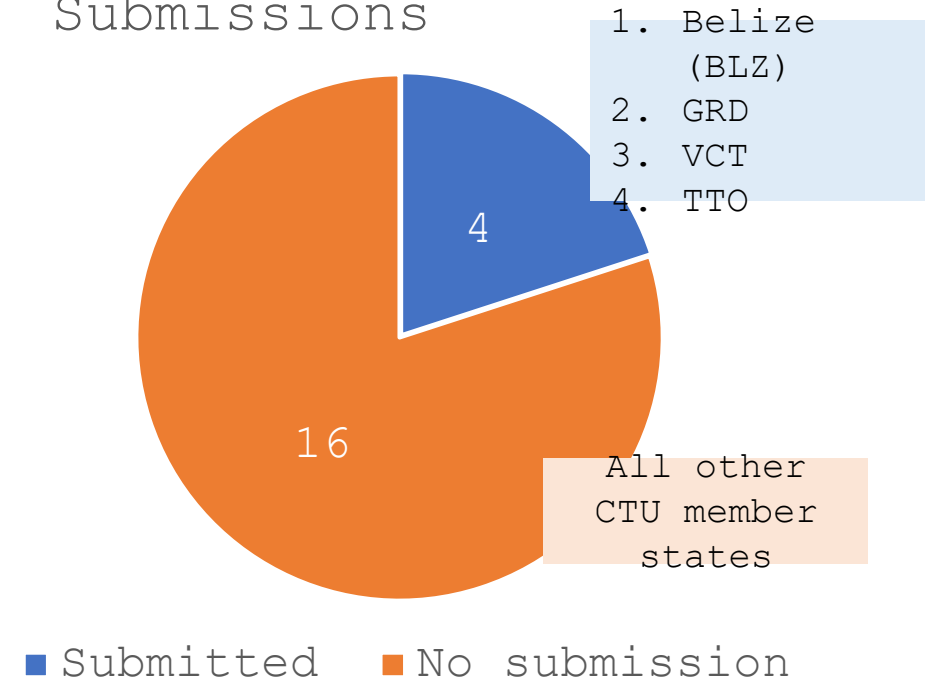
¹Barbados, Grenada, St. Vincent and the Grenadines, and Trinidad and Tobago

Submission Status

Smart Seas Country Submissions



CTU Member State Submissions



Completion Status

Country	# Submissions	# Complete Submissions
BLZ	1	0
GRD	1	0
VCT	2	0
TTO	4	0
Percent complete		0

Completion status notes:

1. BLZ: submission needs to be updated using updated survey instrument
2. GRD: station under construction; submission to be updated following completion
3. VCT: station equipment and station operations not specified; awaiting information from Coast Guard
4. TTO: awaiting revisions from stations to be considered complete

Summary of Findings

Country	Findings
GRD	<ul style="list-style-type: none">• 2 stations on the island, both under construction• Plans to establish a MRSC², within the TTO MRCC
VCT	<ul style="list-style-type: none">• 2 stations on the island• Operated by the VCT coast guard and signal station
TTO	<ul style="list-style-type: none">• 9 stations identified by TATT through their licensing database• Only 4 have submitted responses thus far• North Post Radio Station performs MRCC comms operations on behalf of the Trinidad and Tobago Coast Guard• At least 1 limited coast station's callsign & MMSI not within TTO ITU assignments (see next slide)

Sample Output: Station Register

Country	Station Name	Station Type ³	Countries of Responsibility	Agency Responsible	Sea Area	Station Contact Details		
						Phone No.	Callsign	MMSI
BLZ	National Maritime Comm Center	NCS	BLZ	Belize Port Authority	A1	+ (501) 222- 5666	TBD	TBD
GRD	Grenada GMDSS	NCS	GRD	National Telecommunications Regulatory Commission	TBD	+(473) 405-2362	TBD	TBD
VCT	St. Vincent Signal Station	LCS	VCT	SVG Port Authority	TBD	+1(784) 456- 1165	TBD	TBD
	Coast Guard	NCS	VCT	Coast Guard Service	A1, A2	+1(784) 457-4578	J8B	TBD
TTO	Coast Guard Control	MRCC	BRB, GRD, VCT, TTO	Trinidad and Tobago Coast Guard	A1, A2, A3	+1(868) 634- 8824	9YA	003621111
	North Post Radio Station	NCS	BRB, GRD, VCT, TTO	Telecommunications Services of Trinidad and Tobago	A1, A2, A3	+1(868) 637-4474	9YL	003621001
	TBD	LCS	TTO	BHP	A1	TBD	TBD	TBD
	TBD	LCS	TTO	Oldendorff Carriers Trinidad & Tobago Ltd.	TBD	+1(868) 224-8506	D5IX5 ⁴	636017017 ⁴

³ Station Types: (i) NCS - National Coast Station (ii) LCS - Limited Coast Station (iii) MRCC - Maritime Rescue Co-ordination Centre

⁴ Not a valid MMSI/callsign based on TTO assignments for LCS: coast station MMSI format: 00362XXXX; Callsign: between 9YR20-9YR99

Next Steps

Completion of survey by Smart Seas countries



TATT's submission of completed survey to ITU's BR⁴



BR's formal approval of MRCC survey submission to count as MARS notification



Rollout to non-Smart Seas countries particularly those without Spectrum Center



Population and finalization of all survey outputs: registry and map of coast stations and MRCCs, simulations of coverage, checklists for stations

SMART SEAS TOOLKIT
ASSESSMENT WORKSHOP
16 February 2023

Thank you

Spectrum Center vs Smart Seas MRCC & CS Survey

	Spectrum Center	Smart Seas MRCC & CS Survey
Capacity	Unlimited external business users	Unlimited
Cost	Billed monthly or annually based on plan	Free
ITU radio services	Support all ITU radio services	Specific towards maritime comms
Supported Requests	<ul style="list-style-type: none"> • New frequency authorizations • Modification to existing frequency authorizations • Cancellation of existing frequency authorizations • Change of company name • License/Authorization transfers • New Equipment Type Approval authorizations 	<ul style="list-style-type: none"> • identify and assess gaps in regulatory compliance and regional harmonization • Facilitate List IV MARS notifications

TT MRCC Notifying Agencies

CTU Member state	Notifying Agency	Point Contact Name	Point Contact Email	Agency Email	Agency Phone Contact
Barbados	Telecom Unit, Ministry of Innovation Science and Smart Technology	George Foster	George.foster@barbados.gov.bb	-	1 (246) 310-1300
Grenada	National Telecommunications Regulatory Commission (NTRC)	TBD	TBD	gntrc@ntrc.gd	1 (829) 732-5555
St. Vincent and the Grenadines	Maritime Affairs of St. Vincent and the Grenadines	TBD	TBD	ntrc@ntrc.vc	(784) 456-1378
Trinidad & Tobago	Telecommunications Authority of Trinidad and Tobago	Cynthia Reddock-Downes	crdownes@tatt.org.tt	-	1 (868) 675-8288